

# Notice of Allowability

Application No.

10/672,732

Examiner

Iraj A Mohandes

Applicant(s)

GRAY, CHARLES L.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/25/2003.
2. ☒ The allowed claim(s) is/are 41-50.
3. ☒ The drawings filed on 25 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 09/28/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**DARREN SCHUBERG**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim 1-21, drawn to a method of operating hybrid vehicle converting a first portion of the amount primary power from the primary source in to direct input energy.

Group II, claims 22-39 drawn to a method of operating hybrid vehicle monitoring an amount of available stored energy within an energy storage.

Group III, claim 40, drawn to monitoring vehicle speed based on the amount of available stored emery at the given speed.

Group IV, claims 41-50, drawn to a series hybrid vehicle having a primary and secondary power source by a combination of the portion of the amount of available stored energy.

2. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions

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I-IV can be used sedately to control (I),monitor (II),convert (III) and operate (IV)as combination source of power for a hybrid vehicle or any other electromechanical rotating machine.

3. During a telephone conversation with Applicant's representative Lorraine Linford Reg. NO.35,939 on November 29, 2004 a provisional election was made without traverse to prosecute the invention of group IV , claims 41-50.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-40 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### **EXAMINER'S AMENDMENT**

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

5. Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative Lorraine Linford Reg. NO.35,939 on November 29, 2004.

6. Non-elected claims 1-40 have been canceled by Examiner amendment.

#### ***Allowable Subject Matter***

7. The following is an examiner's statement of reasons for allowance:

The prior art of the record does not teach or suggest a supporting method for a series hybrid vehicle having a primary power source and a secondary power source, including

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inter alia ,selectively powering the secondary power source with either a portion of the amount of available stored energy, a portion of an amount of direct input energy, a combination of the portion of the amount of available stored energy and the portion of the amount of direct input energy, powering the secondary power source with the portion of the amount of available stored energy when the amount of available stored energy is above a first selected level, powering the secondary power source with the combination of a portion of the amount of available stored energy and a portion of the amount of direct input energy if the available stored energy is either, below a first selected level and the amount of direct input energy is not sufficient enough to meet a power demand, or above the second selected level, using an engine to generate the amount of direct input energy and to generate a first amount of storable energy, based on the amount of available stored energy, operating the engine at or near one of a first predefined power level when the amount of available stored energy is within a predetermined upper range of stored energy, and second predefined power level when the amount of available stored energy is within a predetermined lower range of stored energy, and a third predefined power level within a range of power levels that is inversely proportional to the amount of available energy within a predetermined middle range of stored energy.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IM November 29, 2004

  
DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
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